

HiWi Position: Experimental Support for Fiber-to-Chip micro-optical coupler characterization

Workload: 32 hours/month (6 months)

We are looking for a motivated HiWi student to support experimental work on 3D-printed micro-optical coupling elements for photonic chips.

The work will involve hands-on experimental tasks related to the improvement, alignment, testing, and characterization of this prototype.

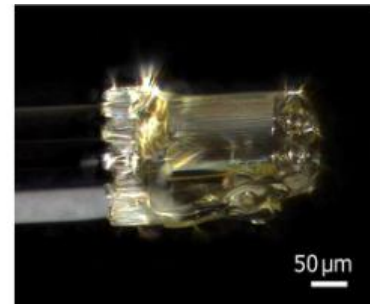
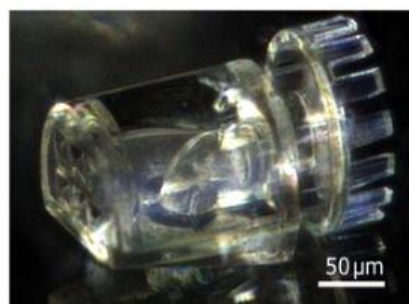
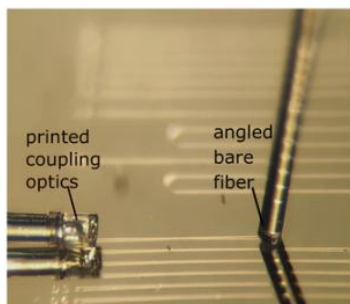
Tasks:

1. Improving/optimizing the existing fiber-optic assembly setup
2. Performing **optical characterization** of printed micro-optical elements/surfaces
3. Supporting robustness and reliability tests under thermal, mechanical, and environmental stress conditions
4. Compiling measurement results, observations, and technical conclusions in a structured manner
5. Helping with general lab organization related to the setup

Desired Profile: We are looking for a student who is interested in practical laboratory work and experimental optics. Experience in one or more of the following areas is helpful but not mandatory:

- Optics or photonics
- Experience working with optical fibers and fiber alignment
- Microscopy or camera-based alignment
- Familiarity with optical/electrical measurement setups
- Python, MATLAB, or similar tools for data analysis
- CAD/3D printing or mechanical prototyping (e.g., SolidWorks)

Application: Send your academic documents to oindrila.ghosh@ito.uni-stuttgart.de



Contact:

Oindrila Ghosh
Pfaffenwaldring 9, Room 9.1.255B
Phone: +49 (711) 685-61762
Mail: oindrila.ghosh@ito.uni-stuttgart.de

Contact:

Oindrila Ghosh
Pfaffenwaldring 9, Room 9.1.255B
Phone: +49 (711) 685-61762
Mail: oindrila.ghosh@ito.uni-stuttgart.de